

[illegible]


```
1 0001 0 MODULE COB$SWITCH(
2 0002 0 IDENT = '1-006' ! file: COB$SWITCH.B32 EDIT:LGB1006
3 0003 0 ) =
4 0004 1 BEGIN
5 0005 1
6 0006 1
7 0007 1 *****
8 0008 1 *
9 0009 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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26 0026 1 *
27 0027 1 *
28 0028 1 *****
29 0029 1
30 0030 1 ++
31 0031 1 FACILITY: COBOL SUPPORT
32 0032 1
33 0033 1 ABSTRACT
34 0034 1
35 0035 1 Reads switches
36 0036 1
37 0037 1
38 0038 1 ENVIRONMENT: Vax-11 User Mode
39 0039 1
40 0040 1 AUTHOR: MLJ , CREATION DATE: 16-JAN-79
41 0041 1
42 0042 1 MODIFIED BY:
43 0043 1
44 0044 1 1-001 - Original. MLJ 16-JAN-79
45 0045 1 1-002 - Added boilerplate and comments. RKR 23-AUG-1979
46 0046 1 1-003 - Change symbolic name of LIBRARY file. RKR 1-OCT-79
47 0047 1 1-004 - Cosmetic changes. RKR 18-OCT-79
48 0048 1 1-005 - Fix typo from 4. RKR 20-OCT-79
49 0049 1 1-006 - Use logical LNM$C_NAMLENGTH instead of hard-coded value of 64.
50 0050 1 LGB 31-OCT-1983
51 0051 1 --
52 0052 1
53 0053 1 !<BLF/PAGE>
```

```
.. 55      0054 1 |
.. 56      0055 1 | SWITCHES
.. 57      0056 1 |
.. 58      0057 1 |
.. 59      0058 1 | SWITCHES ADDRESSING_MODE (EXTERNAL = GENERAL, NONEXTERNAL = WORD_RELATIVE);
.. 60      0059 1 |
.. 61      0060 1 |
.. 62      0061 1 | LINKAGES
.. 63      0062 1 |
.. 64      0063 1 | LINKAGE
.. 65      0064 1 |   L = JSB : GLOBAL(PTR=2, CNT=3, DIG=4);
.. 66      0065 1 |
.. 67      0066 1 | TABLE OF CONTENTS:
.. 68      0067 1 |
.. 69      0068 1 | FORWARD ROUTINE
.. 70      0069 1 |
.. 71      0070 1 |   GET_DIGIT : L ;
.. 72      0071 1 |
.. 73      0072 1 | INCLUDE FILES
.. 74      0073 1 |
.. 75      0074 1 | REQUIRE 'RTLIN:RTLPSECT' ;           ! Macros to declare psects
.. 76      0169 1 | LIBRARY 'RTLSTARLE';
.. 77      0170 1 |
.. 78      0171 1 |
.. 79      0172 1 | MACROS
.. 80      0173 1 |
.. 81      0174 1 |   NONE
.. 82      0175 1 |
.. 83      0176 1 | EQUATED SYMBOLS
.. 84      0177 1 |
.. 85      0178 1 |   NONE
.. 86      0179 1 |
.. 87      0180 1 | PSECT DECLARATIONS:
.. 88      0181 1 |
.. 89      0182 1 |
.. 90      0183 1 | DECLARE_PSECTS (COB) ;           ! Declare psects for COB$ facility
.. 91      0184 1 |
```



```
.. 93      0185 1 GLOBAL ROUTINE COB$SWITCH(NUMBER)=
.. 94      0186 1
.. 95      0187 1 ++      FUNCTIONAL DESCRIPTION
.. 96      0188 1
.. 97      0189 1
.. 98      0190 1 See C79RTLREQ for specification
.. 99      0191 1
100      0192 1
101      0193 1 FORMAL PARAMETERS:
102      0194 1
103      0195 1     NUMBER
104      0196 1
105      0197 1 IMPLICIT INPUTS:
106      0198 1
107      0199 1     Logical name table
108      0200 1
109      0201 1 IMPLICIT OUTPUTS:
110      0202 1
111      0203 1     NONE
112      0204 1
113      0205 1 ROUTINE VALUE:
114      0206 1     1      Success
115      0207 1     0      Failure
116      0208 1
117      0209 1 COMPLETION CODES:
118      0210 1
119      0211 1     NONE
120      0212 1
121      0213 1 SIDE EFFECTS:
122      0214 1
123      0215 1     NONE
124      0216 1
125      0217 1 --
126      0218 1
127      0219 2 BEGIN
128      0220 2 LOCAL
129      0221 2     BUFFER:      VECTOR[LNMSC_NAMLENGTH,BYTE], ! Returned equivalence string
130      0222 2     BUFDESC:    VECTOR[2],      ! Descriptor for BUFFER
131      0223 2     NAMDESC:    VECTOR[2],      ! Descriptor for logical name
132      0224 2     LENGTH:     WORD;           ! Length of equivalence string
133      0225 2 GLOBAL REGISTER
134      0226 2     PTR=2, CNT=3, DIG=4;
135      0227 2
136      0228 2
137      0229 2     BUFDESC[0] = LNMSC_NAMLENGTH;      ! Set up descriptors
138      0230 2     BUFDESC[1] = BUFFER;                !
139      0231 2     NAMDESC[0] = 12;                    !
140      0232 2     NAMDESC[1] = UPLIT('COB$SWITCHES'); !
141      0233 2
142      0234 2
143      0235 2 IF NOT $TRNLOG(      ! Translate COB$SWITCHES
144      0236 2     LOGNAM=NAMDESC, RSLLEN=LENGTH, RSLBUF=BUFDESC)
145      0237 2 THEN
146      0238 2     RETURN 0;
147      0239 2
148      0240 2
149      0241 2     PTR = BUFFER;                ! Set up global registers
```

```
.. 150      0242      2      CNT = .LENGTH;
.. 151      0243      2
.. 152      0244      2
.. 153      0245      2      WHILE 1 DO
.. 154      0246      2      BEGIN LOCAL VAL;
.. 155      0247      2
.. 156      0248      2      Skip leading non-digits
.. 157      0249      2
.. 158      0250      2      WHILE (IF .CNT GTR 0 THEN NOT GET_DIGIT() ELSE RETURN 0) DO 0;
.. 159      0251      2
.. 160      0252      2      Remember first digit
.. 161      0253      2
.. 162      0254      2      VAL = .DIG;
.. 163      0255      2
.. 164      0256      2      Scan over digits to next non-digit, computing value in VAL
.. 165      0257      2
.. 166      0258      2      WHILE (IF .CNT GTR 0 THEN GET_DIGIT() ELSE 0) DO VAL = .VAL * 10 + .DIG;
.. 167      0259      2
.. 168      0260      2      Check VAL against desired switch
.. 169      0261      2
.. 170      0262      2      IF .VAL EQL .NUMBER THEN RETURN 1;
.. 171      0263      2      END;
.. 172      0264      2
.. 173      0265      2
.. 174      0266      2      RETURN 0;
.. 175      0267      1      END;
```

| | | | | | | | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|--------|--|-------|--------|--------|-----------------|---|--|
| | | | | | | | | | | .TITLE | COBSSWITCH | | | | | | |
| | | | | | | | | | | .IDENT | \1-006\ | | | | | | |
| | | | | | | | | | | .PSECT | _COB\$CODE,NOWRT, SHR, PIC,2 | | | | | | |
| 53 | 45 | 48 | 43 | 54 | 49 | 57 | 53 | 24 | 42 | 4F | 43 | 00000 | P.AAA: | .ASCII | \COB\$SWITCHES\ | : | |
| | | | | | | | | | | .EXTRN | SYS\$TRNLOG | | | | | | |
| | | | | | | | | | | .ENTRY | COBSSWITCH, Save R2,R3,R4,R5,R6,R7,R8,R9,- | | : | 0185 | | | |
| | | | | | | | | | | | R10,R11 | | : | | | | |
| | | | | | | | | | | MOVAB | -276(SP), SP | | : | | | | |
| | | | | | | | | | | MOVZBL | #255, BUFDESC | | : | 0229 | | | |
| | | | | | | | | | | MOVAB | BUFFER, BUFDESC+4 | | : | 0230 | | | |
| | | | | | | | | | | MOVL | #12, NAMDESC | | : | 0231 | | | |
| | | | | | | | | | | MOVAB | P.AAA, NAMDESC+4 | | : | 0232 | | | |
| | | | | | | | | | | CLRQ | -(SP) | | : | 0236 | | | |
| | | | | | | | | | | CLRL | -(SP) | | : | | | | |
| | | | | | | | | | | PUSHAB | BUFDESC | | : | | | | |
| | | | | | | | | | | PUSHAB | LENGTH | | : | | | | |
| | | | | | | | | | | PUSHAB | NAMDESC | | : | | | | |
| | | | | | | | | | | CALLS | #6, SYS\$TRNLOG | | : | | | | |
| | | | | | | | | | | BLBC | R0, 4\$ | | : | | | | |
| | | | | | | | | | | MOVAB | BUFFER, PTR | | : | 0241 | | | |
| | | | | | | | | | | MOVZWL | LENGTH, CNT | | : | 0242 | | | |
| | | | | | | | | | | TSTL | CNT | | : | 0250 | | | |
| | | | | | | | | | | BLEQ | 4\$ | | : | | | | |
| | | | | | | | | | | BSBW | GET_DIGIT | | : | | | | |
| | | | | | | | | | | BLBC | R0, 1\$ | | : | | | | |

| | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|-----------|-------|-------|----|-------|-------|--|--|
| | | | | | | | | | | OFFC | 00000 | | | | | | |
| | | | | | | | | | | 5E | FE | CE | 9E | 00002 | | | |
| | | | | | | | | | | OC | AE | FF | 8F | 9A | 00007 | | |
| | | | | | | | | | | 10 | AE | 14 | AE | 9E | 0000C | | |
| | | | | | | | | | | 04 | AE | OC | DO | 00011 | | | |
| | | | | | | | | | | 08 | AE | DC | AF | 9E | 00015 | | |
| | | | | | | | | | | | | 7E | 7C | 0001A | | | |
| | | | | | | | | | | | | 7E | D4 | 0001C | | | |
| | | | | | | | | | | | | 18 | AE | 9F | 0001E | | |
| | | | | | | | | | | | | 10 | AE | 9F | 00021 | | |
| | | | | | | | | | | | | 18 | AE | 9F | 00024 | | |
| | | | | | | | | | | 00000000G | 00 | 06 | FB | 00027 | | | |
| | | | | | | | | | | | 32 | 50 | E9 | 0002E | | | |
| | | | | | | | | | | | 52 | 14 | AE | 9E | 00031 | | |
| | | | | | | | | | | | 53 | 6E | 3C | 00035 | | | |
| | | | | | | | | | | | | 53 | D5 | 00038 | 1\$: | | |
| | | | | | | | | | | | | 27 | 15 | 0003A | | | |
| | | | | | | | | | | | | 0000V | 30 | 0003C | | | |
| | | | | | | | | | | F6 | | 50 | E9 | 0003F | | | |

COBSSWITCH
1-006

H 5
16-Sep-1984 00:15:51
14-Sep-1984 12:10:59

VAX-11 Bliss-32 V4.0-742
[COBRTL.SRC]COBSSWITCH.B32;1

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| | | | | | |
|----|-------|----------------|-------|--------------|--------|
| | 55 | 54 D0 00042 | MOVL | DIG, VAL | : 0254 |
| | | 53 D5 00045 | TSTL | CNT | : 0258 |
| | | 10 15 00047 | BLEQ | 3\$ | |
| | | 0000V 30 00049 | BSBW | GET_DIGIT | |
| | 0A | 50 E9 0004C | BLBC | RO, 3\$ | |
| 50 | 55 | 0A C5 0004F | MULL3 | #10, VAL, RO | |
| 55 | 50 | 54 C1 00053 | ADDL3 | DIG, RO, VAL | |
| | | EC 11 00057 | BRB | 2\$ | |
| | 04 AC | 55 D1 00059 | CMPL | VAL, NUMBER | : 0262 |
| | | D9 12 0005D | BNEQ | 1\$ | |
| | 50 | 01 D0 0005F | MOVL | #1, RO | |
| | | | RET | | |
| | | 50 04 00062 | CLRL | RO | : 0267 |
| | | | RET | | |
| | | 04 00065 | | | |

; Routine Size: 102 bytes, Routine Base: _COB\$CODE + 000C

: 176 0268 1
: 177 0269 1 !<BLF/PAGE>

```
179 0270 1 ROUTINE GET_DIGIT: L=
180 0271 1
181 0272 1 ++ FUNCTIONAL DESCRIPTION
182 0273 1
183 0274 1
184 0275 1 Get next character from string, returning:
185 0276 1 PTR advanced to next character
186 0277 1 CNT decremented
187 0278 1 DIG containing the character less %C'0'
188 0279 1 Value true if and only if the character was a digit
189 0280 1
190 0281 1
191 0282 1 FORMAL PARAMETERS:
192 0283 1
193 0284 1
194 0285 1 IMPLICIT INPUTS:
195 0286 1
196 0287 1 NONE
197 0288 1
198 0289 1 IMPLICIT OUTPUTS:
199 0290 1
200 0291 1 NONE
201 0292 1
202 0293 1 ROUTINE VALUE:
203 0294 1 COMPLETION CODES:
204 0295 1
205 0296 1 NONE
206 0297 1
207 0298 1 SIDE EFFECTS:
208 0299 1
209 0300 1 NONE
210 0301 1
211 0302 1 --
212 0303 1
213 0304 2 BEGIN
214 0305 2 EXTERNAL REGISTER
215 0306 2 PTR, CNT, DIG;
216 0307 2 LOCAL
217 0308 2 VAL;
218 0309 2
219 0310 2 VAL = 0;
220 0311 2 DIG = .(.PTR)<0,8>;
221 0312 2 PTR = .PTR + 1;
222 0313 2 CNT = .CNT - 1;
223 0314 2 DIG = .DIG - %C'0';
224 0315 2 IF .DIG LEQU 9 THEN VAL = .VAL + 1;
225 0316 2 .VAL
226 0317 1 END;
```

```
! Assume false value
! Fetch character
! Advance pointer
! Decrement count
! Bias character
! Set true value if need be
! Return the value
```

```
50 D4 0000 GET_DIGIT:
54 82 9A 00002 CLRL VAL
53 D7 00005 MOVZBL (PTR)+, DIG
DECL CNT
```

```
: 0310
: 0311
: 0313
```


COB\$SWITCH
1-006

J 5
16-Sep-1984 00:15:51
14-Sep-1984 12:10:59

VAX-11 Bliss-32 V4.0-742
[COBRTL.SRC]COB\$SWITCH.B32;1

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54
09

30 C2 00007
54 D1 0000A
02 1A 0000D
50 D6 0000F
05 00011 1\$:

SUBL2 #48, DIG
CMPL DIG, #9
BGTRU 1\$
INCL VAL
RSB

: 0314
: 0315
: 0317

: Routine Size: 18 bytes, Routine Base: _COB\$CODE + 0072

: 227 0318 0 END ELUDOM

PSECT SUMMARY

Name Bytes Attributes
_COB\$CODE 132 NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)

Library Statistics

| File | ----- Total | Symbols Loaded | ----- Percent | Pages Mapped | Processing Time |
|-------------------------------------|----------------|-------------------|------------------|-----------------|--------------------|
| _\$255\$DUA28:[SYSLIB]STARLET.L32;1 | 9776 | 4 | 0 | 581 | 00:00.7 |

COMMAND QUALIFIERS

: BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACE/LIS=LIS\$:COB\$SWITCH/OBJ=OBJ\$:COB\$SWITCH MSRC\$:COB\$SWITCH/UPDATE=(ENH\$:COB\$SWITCH
:)

: Size: 120 code + 12 data bytes
: Run Time: 00:03.5
: Elapsed Time: 00:15.8
: Lines/CPU Min: 5451
: Lexemes/CPU-Min: 20811
: Memory Used: 62 pages
: Compilation Complete

0064 AH-BT13A-SE
VAX/VMS V4.0

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